



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/691,623

10/24/2003

Junichi Hara

244455US2

7188

22850

7590

08/24/2006

C. IRVIN MCCLELLAND
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

WANG, CLAIRE X

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/691,623	Applicant(s) HARA ET AL.	
	Examiner Claire Wang	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/24/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Dekel et al. (US 6,314,452 B1).

As to claim 1, Dekel et al. (from this point forward shall be referred to as Dekel) teaches an image processing apparatus (image streaming system, Col. 1 lines 57-58), comprising: a memory (storage device, claim 1a) which stores a code stream (original digital image, claim 1a) having a wavelet division level (wavelet coefficient, claim 9). Dekel also teaches of an interface unit (communication network, claim 1b), which transmits the code stream to another apparatus (client computer, claim 1b). Dekel further teaches of a processing unit (pre-processing step, claim 9) which changes the wavelet division level of the code stream before the transmission (region of interest is requested by the client computer then the server will adjust the wavelet coefficient accordingly, claim 1A) of the code stream to said another apparatus by acquiring a target division level (client request, claim 1) that is a wavelet division level of said another apparatus (the client computer generates a first request from the original digital image; claim 1), checking a difference between the target division level and the wavelet division level of the code stream (the client computer renders the received data and

decides if it is sufficient for the region of interest, claim 2), generating data that compensates for the difference, and embedding the generated data into the code stream (if the client computer requires additional data to be sent from the server then another request is made to the system; the system then sends out any additional image data; claim 1).

As to claim 6, it differs from claim 1 only in that claim 1 is a method claim whereas claim 6 is the computer program (claim 2) of claim 1. Thus claim 6 is analyzed previously discussed as respect to claim 1.

As to claim 2, Dekel teaches in response to the difference indicating the target division level lower than the wavelet division level of the code stream (if the client's area of interest requires higher resolution, claims 1, 15-16), said processing unit generates the data that compensates for the difference by reading coded data belonging to levels higher than the target division level (the system transmits data with higher resolution, claims 15(2), 16(2)), decoding the read coded data to obtain wavelet coefficients (claim 2), performing inverse wavelet transform on the wavelet coefficients to generate LL component data (claim 2), and encoding the LL component data (claims 1,2).

As to claim 3, Dekel teaches in response to the difference indicating the target division level higher than the wavelet division level of the code stream (if the client's area of interest requires lower resolution, claims 1, 15-16), said processing unit generates the data that compensates for the difference by reading coded data of an LL component belonging to a level lower than the target division level (the system transmits data with higher resolution, claims 15(1), 16(1)), decoding the read coded data of the LL

component to obtain wavelet coefficients (claim 2), performing wavelet transform on the wavelet coefficients to generate wavelet coefficients of the target division level (claim 2), and encoding the wavelet coefficients of the target division level (claims 1,2).

As to claim 4, Dekel teaches the processing unit changes a description of coding conditions stored in the code stream, the change in the description being responsive to the change in the wavelet division level of the code stream (Fig. 3 has coded the original image with different wavelet coefficients, each coefficient corresponds to a certain resolution; Col. 5 lines 60-67).

As to claim 5, Dekel teaches the description of coding conditions is a description of a decomposition level number included in parameter SPcod regarding a coding style of components, which is part of a default coding style marker (COD) contained in the code stream (Section 4.1 explains the way to encode the original image so that the decoder knows where to put the data received).

As to claim 7, it differs from claim 2 only in that claim 2 is a method claim whereas claim 7 is the computer program (claim 2) of claim 2. Thus claim 7 is analyzed previously discussed as respect to claim 2.

As to claim 8, it differs from claim 3 only in that claim 3 is a method claim whereas claim 8 is the computer program (claim 2) of claim 3. Thus claim 8 is analyzed previously discussed as respect to claim 3.

As to claim 9, it differs from claim 4 only in that claim 4 is a method claim whereas claim 9 is the computer program (claim 2) of claim 4. Thus claim 9 is analyzed previously discussed as respect to claim 4.

As to claim 10, it differs from claim 5 only in that claim 5 is a method claim whereas claim 10 is the computer program (claim 2) of claim 5. Thus claim 10 is analyzed previously discussed as respect to claim 5.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sirohey et al. (US 2002/0057850 A1) teaches a method of transmitting and displaying compressed images.

Schwartz et al. (US 6,898,323 B2) teaches a memory and a wavelet processing method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Claire Wang whose telephone number is 571-270-1051. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on 571-272-7222. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2624

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Claire Wang
8/18/2006


CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER